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09/931,362	08/16/2001	Byung Ju Dan	2080-3-35	3601

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EXAMINER

BELL, MELTIN

ART UNIT PAPER NUMBER

2129

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/931,362

Applicant(s)

DAN ET AL.

Examiner

Meltin Bell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This action is responsive to application **09/931,362** filed 08/16/2001 as well as the Specification Changes, Drawing Corrections and Amendment filed 1/31/05. Claims 1-18 filed by the applicant have been entered and examined. An action on the merits of claims 1-18 appears below.

#### *Priority*

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) based on an application #2000-47829 filed in Korea on **August 18, 2000**.

#### *Claim Rejections - 35 USC § 102/103*

Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Office presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Office to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 7, 10 and 13 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Gabai et al* USPN 6,773,344 "Methods and apparatus for integration of interactive toys with interactive television and cellular communication systems" (Priority Claimed on 60/189,914 filed Mar. 16, 2000) in view of *Nakamura et al* "Play and Learning in the Digital Future" (Nov.-Dec. 1999) in view of *Yang et al* "Interactive artificial life based on behavior and perception in a virtual environment" (30 July-2 Aug. 2000) and in further view of *Olafsson* "Games on networks" (Oct. 1997).

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**Regarding claim 1:**

*Gabai et al* teaches,

A computerized toy (Abstract) learning (Brief Summary text, paragraph 103) apparatus using a community (Detailed Description text, paragraph 89), the apparatus comprising:

- a community having a character (Detailed Description text, paragraph 292) which grows by learning online (Detailed Description text, paragraphs 341-344)
- a toy that grows by receiving one of a cyber character's experience and a user's learning experience (Detailed Description text, paragraph 271)
- cyber systems (Detailed Description text, paragraph 144)

However, *Gabai et al* doesn't explicitly teach the community is a cyber community and the character is a cyber character while *Nakamura et al* teaches,

- the community is a cyber community (Abstract)

*Yang et al* teaches,

- the character is a cyber character (Abstract)

*Olaffson* teaches,

- growth (page 1557, right column, paragraph 1) by learning (page 1557, left column, paragraph 3)

Motivation - The portions of the claimed apparatus would have been a highly desirable feature in this art for directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2) and applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2). Therefore, it would have been obvious to

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one of ordinary skill in the art at the time the invention was made, to modify *Gabai et al* as taught by *Nakamura et al*, *Yang et al* and *Olaffson* for the purpose of directing autonomous animated characters as well as interacting with a 'dog' character in a mixed environment and applying a set of strategies.

**Regarding claim 2:**

The rejection of claim 2 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the reference. Claim 2's limitations difference is taught in *Gabai et al*:

- the cyber community is performed in a network server (Brief Summary text, paragraph 24) that provides cyber character information of a first user and cyber character information of second user

**Regarding claim 3:**

The rejection of claim 3 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the reference. Claim 3's limitations difference is taught in *Gabai et al*:

- the cyber community is performed in a performance apparatus for outputting the information of the cyber character (Detailed Description text, paragraph 317)

**Regarding claim 4:**

The rejection of claim 4 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the reference. Claim 4's limitations difference is taught in *Gabai et al*:

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- the cyber community is performed in a network server supplying operational data for the toy (Brief Summary text, paragraph 27) and a performance apparatus providing an upgrade program from the network server (Detailed Description text, paragraph 253)

**Regarding claim 7:**

The rejection of claim 7 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the reference. Claim 7's limitations difference is taught in *Gabai et al.*:

- the cyber character comprises a cyber character that exists only in a cyber community and a second cyber character of a user that represents the toy in the real world  
(Detailed Description text, paragraph 288)

**Regarding claim 10:**

The rejection of claim 10 is the same as that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 10's limitations difference is taught in *Gabai et al.*:

- a sensor for sensing an outside pulsation (Detailed Description text, paragraph 127)  
- an input apparatus for inputting one of an image (Detailed Description text, paragraph 263), audio information (Detailed Description text, paragraph 261) and letters (Detailed Description text, paragraph 196)  
- a communication apparatus for wire and wireless communication (Detailed Description text, paragraph 260)

**Regarding claim 13:**

*Gabai et al* teaches,

A learning method (Brief Summary text, paragraph 103) for a computerized toy (Abstract) using a community (Detailed Description text, paragraph 89), the method comprising:

- having the toy obtain experience information (Detailed Description text, paragraph 271) by one of controlling a certain part of the toy (Detailed Description text, paragraphs 303, 397 and 398), controlling a remote controller (Detailed Description text, paragraph 157) and using an information input means such as a microphone (Detailed Description text, paragraph 156)
- storing the experience information in a memory (Detailed Description text, paragraphs 165-166 and 409)
- having the activity of the character (Detailed Description text, paragraph 292) in the community reflect the experience information by transmitting (Fig. 46) the experience information to a network server (Detailed Description text, paragraphs 79, 150-154 and 305)
- having the toy learn (Detailed Description text, paragraph 317) by transmitting (Fig. 46) the experience information according to the activity of the character in the community (Detailed Description text, paragraphs 342)
- upgrading an operating/application program (Detailed Description text, paragraph 253) according to the extent of learning of the toy
- cyber systems (Detailed Description text, paragraph 144)



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However, *Gabai et al* doesn't explicitly teach the community is a cyber community and the character is a cyber character while *Nakamura et al* teaches,

- the community is a cyber community (Abstract)

*Yang et al* teaches,

- the character is a cyber character (Abstract)

*Olafsson* teaches,

- growth (page 1557, right column, paragraph 1) by learning (page 1557, left column, paragraph 3)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2) and applying a set of strategies (*Olafsson*, page 1556, section I, paragraph 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Gabai et al* as taught by *Nakamura et al*, *Yang et al* and *Olafsson* for the purpose of directing autonomous animated characters as well as interacting with a 'dog' character in a mixed environment and applying a set of strategies.

### ***Claim Rejections - 35 USC § 103***

Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Office presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Office to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as obvious over *Gabai et al* in view of *Nakamura et al* in view of *Yang et al* in view of *Olafsson* and in further view of *Okada et al* USPN 6,609,968 "Rearing simulation apparatus" (Filed Jun. 26, 2000).

**Regarding claim 5:**

*Gabai et al* teaches,

A computerized toy (Abstract) learning (Brief Summary text, paragraph 103) apparatus using a community (Detailed Description text, paragraph 89), the apparatus comprising:

- a community having a character (Detailed Description text, paragraph 292) which grows by learning online (Detailed Description text, paragraphs 341-344)
- a toy that grows by receiving one of a cyber character's experience and a user's learning experience (Detailed Description text, paragraph 271)

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- cyber systems (Detailed Description text, paragraph 144)
- a home (family) (Detailed Description text, paragraphs 249 and 363) for a cyber character (Detailed Description text, paragraph 301)
- a school (Detailed Description text, paragraphs 317 and 321) in which the cyber character learns audio information comprising at least one of music (Detailed Description text, paragraph 396), voice (Detailed Description text, paragraph 375), motion and gesture (Detailed Description text, paragraphs 303, 397 and 398)
- a robot (Detailed Description text, paragraph 384) education (Detailed Description text, paragraph 253) center (Detailed Description text, paragraphs 251 and 330) for one of upgrading a cyber character program (Detailed Description text, paragraph 253) and downloading (Detailed Description text, paragraph 194-195) operation data and an information center for providing data comprising at least one of a shopping mall (Detailed Description text, paragraph 93), news and weather (Detailed Description text, paragraphs 122 and 199) and wherein the cyber character acts as a shopping guide (Detailed Description text, paragraph 192)

However, *Gabai et al* doesn't explicitly teach the community is a cyber community, the character is a cyber character and a home (family) for rearing a cyber character while *Nakamura et al* teaches,

- the community is a cyber community (Abstract)

*Yang et al* teaches,

- the character is a cyber character (Abstract)

*Olaffson* teaches,

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- growth (page 1557, right column, paragraph 1) by learning (page 1557, left column, paragraph 3)

*Okada et al* teaches,

- home rearing a cyber character (Detailed Description text, paragraph 23)

Motivation - The portions of the claimed apparatus would have been a highly desirable feature in this art for directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2), enhancing the satisfaction of a player (*Okada et al*, Detailed Description text, paragraph 26) and applying a set of strategies (*Olafsson*, page 1556, section I, paragraph 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Gabai et al* as taught by *Nakamura et al*, *Yang et al*, *Okada et al* and *Olafsson* for the purpose of directing autonomous animated characters as well as interacting with a 'dog' character in a mixed environment, enhancing the satisfaction of a player and applying a set of strategies.

**Regarding claim 9:**

The rejection of claim 9 is the same as that for claims 1 and 5 as recited above since the stated limitations of the claim are set forth in the references.

Claim 6 is rejected under 35 U.S.C. 103(a) as obvious over *Gabai et al* in view of *Nakamura et al* in view of *Yang et al* in view of *Olafsson* and in further view of *Brown*

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USPN 6,210,272 "Multi-player interactive electronic game for health education" (Filed Dec. 22, 1997).

**Regarding claim 6:**

*Gabai et al* teaches,

A computerized toy (Abstract) learning (Brief Summary text, paragraph 103) apparatus using a community (Detailed Description text, paragraph 89), the apparatus comprising:

- a community having a character (Detailed Description text, paragraph 292) which grows by learning online (Detailed Description text, paragraphs 341-344)
- a toy that grows by receiving one of a cyber character's experience and a user's learning experience (Detailed Description text, paragraph 271)
- cyber systems (Detailed Description text, paragraph 144)
- the cyber community is performed in a network server (Brief Summary text, paragraph 24) that provides cyber character information of a first user and cyber character information of second user

However, *Gabai et al* doesn't explicitly teach the community is a cyber community, the character is a cyber character and the network server is characterized in that programs for synchronizing the cyber community are provided to respective users to for contacting cyber characters of other users while *Nakamura et al* teaches,

- the community is a cyber community (Abstract)

*Yang et al* teaches,

- the character is a cyber character (Abstract)

*Olaffson* teaches,

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- growth (page 1557, right column, paragraph 1) by learning (page 1557, left column, paragraph 3)

*Brown* teaches,

- the network server is characterized in that programs for synchronizing the cyber community are provided to respective users to for contacting cyber characters of other users (Detailed Description text, paragraph 31)

Motivation - The portions of the claimed apparatus would have been a highly desirable feature in this art for directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2), applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2) and correlating the players progress in the game (*Brown*, Detailed Description text, paragraph 33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Gabai et al* as taught by *Nakamura et al*, *Yang et al*, *Olaffson* and *Brown* for the purpose of directing autonomous animated characters as well as interacting with a 'dog' character in a mixed environment and correlating the players progress in the game.

Claim 8 is rejected under 35 U.S.C. 103(a) as obvious over *Gabai et al* in view of *Nakamura et al* in view of *Yang et al* in view of *Olaffson* and in further view of *Bushmitch et al* USPN 6,494,762 "Portable electronic subscription device and service" (Filed Mar. 31, 2000).

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**Regarding claim 8:**

*Gabai et al* teaches,

A computerized toy (Abstract) learning (Brief Summary text, paragraph 103) apparatus using a community (Detailed Description text, paragraph 89), the apparatus comprising:

- a community having a character (Detailed Description text, paragraph 292) which grows by learning online (Detailed Description text, paragraphs 341-344)
- a toy that grows by receiving one of a cyber character's experience and a user's learning experience (Detailed Description text, paragraph 271)
- cyber systems (Detailed Description text, paragraph 144)
- the cyber community is performed in a performance apparatus for outputting the information of the cyber character (Detailed Description text, paragraph 317)

However, *Gabai et al* doesn't explicitly teach the community is a cyber community, the character is a cyber character and the performance apparatus has wire and wireless communication functions and is one of a computer, a mobile phone and a PDA while

*Nakamura et al* teaches,

- the community is a cyber community (Abstract)

*Yang et al* teaches,

- the character is a cyber character (Abstract)

*Olafsson* teaches,

- growth (page 1557, right column, paragraph 1) by learning (page 1557, left column, paragraph 3)

*Bushmitch et al* teaches,

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- the performance apparatus has wire and wireless communication functions and is one of a computer, a mobile phone and a PDA (Detailed Description text, paragraphs 2-5)

Motivation - The portions of the claimed apparatus would have been a highly desirable feature in this art for directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2), applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2) and analyzing and correlating multiple stimuli (*Bushmitch et al*, Detailed Description text, paragraph 42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Gabai et al* as taught by *Nakamura et al*, *Yang et al*, *Olaffson* and *Bushmitch et al* for the purpose of directing autonomous animated characters as well as interacting with a 'dog' character in a mixed environment, applying a set of strategies and analyzing/correlating multiple stimuli.

Claims 11-12 and 17 are rejected under 35 U.S.C. 103(a) as obvious over *Gabai et al* in view of *Nakamura et al* in view of *Yang et al* in view of *Olaffson* and in further view of *Yokoo et al* USPN 6,449,518 "Storage medium, robot, information processing device and electronic pet system" (Filed Aug. 18, 1998).

**Regarding claim 11:**

*Gabai et al* teaches,

A computerized toy (Abstract) learning (Brief Summary text, paragraph 103) apparatus using a community (Detailed Description text, paragraph 89), the apparatus comprising:



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- a community having a character (Detailed Description text, paragraph 292) which grows by learning online (Detailed Description text, paragraphs 341-344)
- a toy that grows by receiving one of a cyber character's experience and a user's learning experience (Detailed Description text, paragraph 271)
- cyber systems (Detailed Description text, paragraph 144)
- the cyber community is performed in a performance apparatus for outputting the information of the cyber character (Detailed Description text, paragraph 317)

However, *Gabai et al* doesn't explicitly teach the community is a cyber community, the character is a cyber character and the toy further comprises memory for information and an input/output unit for exchanging information with other toys while *Nakamura et al* teaches,

- the community is a cyber community (Abstract)

*Yang et al* teaches,

- the character is a cyber character (Abstract)

*Olaffson* teaches,

- growth (page 1557, right column, paragraph 1) by learning (page 1557, left column, paragraph 3)

*Yokoo et al* teaches,

- the toy further comprises memory for information and an input/output unit (Detailed Description text, paragraph 65) for exchanging information with other toys (Detailed Description text, paragraph 110)

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Motivation - The portions of the claimed apparatus would have been a highly desirable feature in this art for directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2), applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2) and picking up a part of the gene data of an electronic pet serving as a parent (*Yokoo et al*, Detailed Description text, paragraph 107). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Gabai et al* as taught by *Nakamura et al*, *Yang et al*, *Olaffson* and *Yokoo et al* for the purpose of directing autonomous animated characters as well as interacting with a 'dog' character in a mixed environment, applying a set of strategies and picking up a part of the gene data of an electronic pet serving as a parent.

**Regarding claim 12:**

The rejection of claim 12 is the same as that for claim 11 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 17:**

The rejection of claim 17 is the same as that for claims 13 and 11 as recited above since the stated limitations of the claim are set forth in the references.

Claims 14-15 are rejected under 35 U.S.C. 103(a) as obvious over *Gabai et al* in view of *Nakamura et al* in view of *Yang et al* in view of *Olaffson* and in further view of

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*Faris et al* USPN 6,659,861 "Internet-based system for enabling a time-constrained competition among a plurality of participants over the internet" (Filed May 26, 2000).

**Regarding claim 14:**

*Gabai et al* teaches,

A learning method (Brief Summary text, paragraph 103) for a computerized toy (Abstract) using a community (Detailed Description text, paragraph 89), the method comprising:

- having the toy obtain experience information (Detailed Description text, paragraph 271) by one of controlling a certain part of the toy (Detailed Description text, paragraphs 303, 397 and 398), controlling a remote controller (Detailed Description text, paragraph 157) and using an information input means such as a microphone (Detailed Description text, paragraph 156)
- storing the experience information in a memory (Detailed Description text, paragraphs 165-166 and 409)
- having the activity of the character (Detailed Description text, paragraph 292) in the community reflect the experience information by transmitting (Fig. 46) the experience information to a network server (Detailed Description text, paragraphs 79, 150-154 and 305)
- having the toy learn (Detailed Description text, paragraph 317) by transmitting (Fig. 46) the experience information according to the activity of the character in the community (Detailed Description text, paragraphs 342)

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- upgrading an operating/application program (Detailed Description text, paragraph 253) according to the extent of learning of the toy

- cyber systems (Detailed Description text, paragraph 144)

However, *Gabai et al* doesn't explicitly teach the community is a cyber community the character is a cyber character and a performance apparatus is used to operate the cyber community by downloading a program for operating the cyber community and data information from the network server to reduce the amount of data which is transmitted between the network server and the performance unit while *Nakamura et al* teaches,

- the community is a cyber community (Abstract)

*Yang et al* teaches,

- the character is a cyber character (Abstract)

*Olafsson* teaches,

- growth (page 1557, right column, paragraph 1) by learning (page 1557, left column, paragraph 3)

*Faris et al* teaches,

- a performance apparatus is used to operate the cyber community by downloading a program for operating the cyber community (Detailed Description text, paragraph 26) and data information from the network server to reduce the amount of data which is transmitted between the network server and the performance unit (Detailed Description text, paragraph 33)

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Motivation - The portions of the claimed method would have been a highly desirable feature in this art for directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2), applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2) and greatly reducing the communications loading on central "trunk" network links (*Faris et al*, Detailed Description text, paragraph 32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Gabai et al* as taught by *Nakamura et al*, *Yang et al*, *Olaffson* and *Faris et al* for the purpose of directing autonomous animated characters as well as interacting with a 'dog' character in a mixed environment , applying a set of strategies and greatly reducing the communications loading on central "trunk" network links.

**Regarding claim 15:**

The rejection of claim 15 is similar to that for claim 14 as recited above since the stated limitations of the claim are set forth in the references. Claim 15's limitations difference is taught in *Gabai et al*:

- reflecting information comprising at least one of a learning result (Detailed Description text, paragraphs 342 and 348), a characteristic (Detailed Description text, paragraph 103), a state of feeling (Detailed Description text, paragraph 293) and a degree of growth/intelligence (Detailed Description text, paragraphs 371-372) on the activity of the cyber character which represents the toy in the cyber community

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- reflecting the experience information on the activity of the toy by transmitting (Detailed Description text, paragraphs 150-154) the experience information to the toy (Fig. 46)

Claim 16 is rejected under 35 U.S.C. 103(a) as obvious over *Gabai et al* in view of *Nakamura et al* in view of *Yang et al* in view of *Olafsson* in view of *Faris et al* and in further view of *Gechter* USPN 5,498,002 "Interactive electronic games and screen savers with multiple characters" (Mar. 12, 1996).

**Regarding claim 16:**

*Gabai et al* teaches,

A learning method (Brief Summary text, paragraph 103) for a computerized toy (Abstract) using a community (Detailed Description text, paragraph 89), the method comprising:

- having the toy obtain experience information (Detailed Description text, paragraph 271) by one of controlling a certain part of the toy (Detailed Description text, paragraphs 303, 397 and 398), controlling a remote controller (Detailed Description text, paragraph 157) and using an information input means such as a microphone (Detailed Description text, paragraph 156)
- storing the experience information in a memory (Detailed Description text, paragraphs 165-166 and 409)
- having the activity of the character (Detailed Description text, paragraph 292) in the community reflect the experience information by transmitting (Fig. 46) the experience

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information to a network server (Detailed Description text, paragraphs 79, 150-154 and 305)

- having the toy learn (Detailed Description text, paragraph 317) by transmitting (Fig. 46) the experience information according to the activity of the character in the community

(Detailed Description text, paragraphs 342)

- upgrading an operating/application program (Detailed Description text, paragraph 253) according to the extent of learning of the toy

- cyber systems (Detailed Description text, paragraph 144)

- reflecting information comprising at least one of a learning result (Detailed Description text, paragraphs 342 and 348), a characteristic (Detailed Description text, paragraph 103), a state of feeling (Detailed Description text, paragraph 293) and a degree of growth/intelligence (Detailed Description text, paragraphs 371-372) on the activity of the cyber character which represents the toy in the cyber community

- reflecting the experience information on the activity of the toy by transmitting (Detailed Description text, paragraphs 150-154) the experience information to the toy (Fig. 46)

However, *Gabai et al* doesn't explicitly teach the community is a cyber community the character is a cyber character and a performance apparatus is used to operate the cyber community by downloading a program for operating the cyber community and data information from the network server to reduce the amount of data which is transmitted between the network server and the performance unit while *Nakamura et al* teaches,

- the community is a cyber community (Abstract)

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*Yang et al* teaches,

- the character is a cyber character (Abstract)

*Olaffson* teaches,

- growth (page 1557, right column, paragraph 1) by learning (page 1557, left column, paragraph 3)

*Faris et al* teaches,

- a performance apparatus is used to operate the cyber community by downloading a program for operating the cyber community (Detailed Description text, paragraph 26) and data information from the network server to reduce the amount of data which is transmitted between the network server and the performance unit (Detailed Description text, paragraph 33)

*Gechter* teaches,

- updating the operating/application program according to the extent of learning of the toy (Detailed Description text, paragraph 100)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2), applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2), greatly reducing the communications loading on central "trunk" network links (*Faris et al*, Detailed Description text, paragraph 32) and following the behavioral logic embodied by the characters and the modes of interaction set by the game (*Gechter*, Brief Summary text, paragraph 8). Therefore, it would have



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been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Gabai et al* as taught by *Nakamura et al*, *Yang et al*, *Olafsson*, *Faris et al* and *Gechter* for the purpose of directing autonomous animated characters as well as interacting with a 'dog' character in a mixed environment, applying a set of strategies, greatly reducing the communications loading on central "trunk" network links and following the behavioral logic embodied by the characters.

Claim 18 is rejected under 35 U.S.C. 103(a) as obvious over *Gabai et al* in view of *Nakamura et al* in view of *Yang et al* in view of *Olafsson* in view of *Hornsby et al* USPN 6,527,610 "Wearable interactive digital amusement device" (371 c, 1, 4 Date Jan. 11, 2000) in view of *Hawkins et al* USPN 6,009,458 "Networked computer game system with persistent playing objects" (Dec. 28, 1999) and in further view of *Feigenbaum et al* "The Handbook of Artificial Intelligence Volume 1" (1989).

**Regarding claim 18:**

*Gabai et al* teaches,

A method implemented in a computerized toy (Abstract), the method comprising:

- reflecting experience information (Detailed Description text, paragraph 271) of the toy on a character (Detailed Description text, paragraph 292) in an online (Detailed Description text, paragraphs 341-344) community (Detailed Description text, paragraph 89) according to the selected user (Detailed Description text, paragraph 199) and changing the activity of the community (Detailed Description text, paragraph 303) according to the experience information and the selected user

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- reflecting the experience of the character in the online community (Detailed Description text, paragraphs 150-151) on a current status of the toy (Detailed Description text, paragraph 293) and changing the action of the toy (Detailed Description text, paragraphs 397 and 398)

However, *Gabai et al* doesn't explicitly teach the community is a cyber community, the character is a cyber character, turning on the power supply of the toy, selecting a user mode to identify the user of the toy and selecting a default user if the user mode is not selected while *Nakamura et al* teaches,

- the community is a cyber community (Abstract)

*Yang et al* teaches,

- the character is a cyber character (Abstract)

*Olaffson* teaches,

- growth (page 1557, right column, paragraph 1) by learning (page 1557, left column, paragraph 3)

- selecting a user mode (page 1557, right column, paragraph 1) to identify the user (page 1556, section I, paragraph 1) of the toy

*Hornsby et al* teaches,

- turning on the power supply of the toy (Detailed Description text, paragraphs 18-19 and 32)

*Hawkins et al* teaches,

- selecting a user mode (Brief Summary text, paragraph 30) to identify the user (Figs. 1, 5-6; Detailed Description text, paragraph 82) of the toy (Fig. 9)

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- selecting a default user (Detailed Description text, paragraph 95) if the user mode is not selected (Detailed Description text, paragraph 187)

*Feigenbaum et al* teaches,

- selecting a default user (page 219, Procedural Knowledge in Frames and Scripts section, paragraph 2) if the user mode is not selected

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2), applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2), controlling the images displayed and other operational parameters of the video and/or audio displays used in the present invention (*Hornsby et al*, Detailed Description text, paragraph 20), viewing, mapping, or simply selecting playing objects (*Hawkins et al*, Detailed Description text, paragraph 249) and specifying appropriate methods that can take advantage of the current context (*Feigenbaum et al*, page 320, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Gabai et al* as taught by *Nakamura et al*, *Yang et al*, *Olaffson*, *Hornsby et al*, *Hawkins et al* and *Feigenbaum et al* for the purpose of directing autonomous animated characters as well as interacting with a 'dog' character in a mixed environment, controlling the images displayed and other operational parameters of the video and/or audio displays used in the present invention, viewing, mapping, or simply selecting playing objects and specifying appropriate methods that can take advantage of the current context.

## **RESPONSE TO APPLICANTS' AMENDMENT REMARKS**

Applicant(s) argue(s) that no new matter has been added in the amendment of claims 1-2 and 4-18 (Amendment REMARKS page 15, paragraph 1). However, the new issue in claim 18 is noted: selecting a user mode to identify the user of the toy.

### ***Drawings, Specification and Claims Objections***

Applicant(s) argue(s) that no new matter was added in the amendment to Fig. 2 (Amendment REMARKS page 15, paragraph 2) and that the amendments to Fig. 2 and the specification page 7, lines 5-7 overcome the earlier grounds for objections to Figs. 2 and 4 (Amendment REMARKS page 15, paragraph 4). The amendments to Fig. 2 and the specification paragraph beginning at page 7, line 4 have been entered and examined. However, Fig. 5, items ST11, ST13 and ST14 are objected to because:

- 'USER SELECTION MODE' in ST11 would read well as 'SELECTION MODE'
- the text of ST13 would read well as 'TRANSMIT THE TOY'S CURRENT MODE EXPERIENCE TO A CYBER CHARACTER'
- 'TRANSMIT A CYBER CHARACTER'S EXPERIENCE TO THE TOY'.

Applicant argues that no new matter was added in the amendments to the specification pages 1-9 (Amendment REMARKS page 15, paragraph 3) and that the amendments to the title and pages 1-9 overcome the earlier grounds for objection (Amendment REMARKS page 16, paragraph 2). The amendments to the title and

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specification pages 1-9 have been entered and examined. However, page 7, line 12 of the specification is objected to for a minor informality: 'ID' would read well as 'ID (identification)'.

Applicant argues that the amendments to claims 1, 4-6, 8-9, 11-13 and 18 overcome earlier grounds for objection (Amendment REMARKS page 17, paragraph 2). The amendments to the claims have been entered and examined. However, claims 1, 4, 6, 12-13 and 18 are objected for minor informalities:

- 'computerized' in claim 1 would read well as 'computer-implemented'
- 'claim' in claim 4 would read well as 'claim 1'
- 'to for' in claim 6 would read well as 'for'
- 'replace' in claim 12 would read well as 'replaced'
- 'computerized' in claim 13 would read well as 'computer-implemented'
- 'boy' in claim 13 would read well as 'toy'
- 'method implemented in a computerized toy' would read well as 'computer-implemented method in a toy' in claim 18
- 'the user of' would read well as 'the mode of' in claim 18
- 'default user' would read well as 'default mode' in claim 18
- 'the user mode' would read well as 'a mode' in claim 18
- 'selected user' would read well as 'selected mode' in claim 18.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

Applicant(s) argue(s) that the combination of *Danieli et al* US 5977951, *Gagin et al* US 5630757, *Yamaguchi et al* US 6314412, *Kephart et al* US 20010042087 and *Freeman et al* US 6301462 references is improper (Amendment REMARKS page 17, paragraph 4), the *Yamaguchi et al*, *Kephart et al* and *Freeman et al* references are directed to non-analogous art with respect to the *Danieli et al* and *Gagin et al* references (Amendment REMARKS page 17, paragraph 5), the *Danieli et al* and *Gagin et al* references are not within the same field of endeavor as the *Yamaguchi et al*, *Kephart et al* and *Freeman et al* references (Amendment REMARKS page 18, paragraph 3), the *Yamaguchi et al*, *Kephart et al* and *Freeman et al* references are not at all pertinent to the particular problem to which the present invention is directed nor the particular problems to which the *Danieli et al* and *Gagin et al* references are directed (Amendment REMARKS page 18, paragraph 4 and page 19, paragraph 3) and the *Danieli et al*, *Gagin et al*, *Yamaguchi et al*, *Kephart et al* and *Freeman et al* references fail to meet the basic requirement for a finding of obviousness (Amendment REMARKS page 20, paragraph 4). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection.

The examiner agrees that *Danieli et al*, *Gagin et al*, *Yamaguchi et al*, *Kephart et al* and *Freeman et al* taken either individually or in combination do not disclose the method and apparatus of the inventions defined in claims 1-18. However, *Gabai et al* USPN 6,773,344, *Nakamura et al* "Play and Learning in the Digital Future", *Yang et al* "Interactive artificial life based on behavior and perception in a virtual environment" and

*Olafsson* "Games on networks" are cited individually and in combination for explicitly and inherently disclosing the subject matter set forth in the claims by the applicants.

Specifically, applicants argue that *Danieli et al* does not disclose a cyber character as recited in claim 1 (Amendment REMARKS page 21, paragraph 6).

Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection: *Gabai et al's* Abstract, Detailed Description text, paragraph 89, 144, 271, 292 and 341-344 inherently disclose claim 1's cyber character while *Nakamura et al's* Abstract implicitly discloses claim 1's cyber character and *Yang et al's* Abstract explicitly discloses claim 1's cyber character. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2) and interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2).

Applicants argue that *Gagin et al* does not have claim 1's cyber character which grows by learning online and does not disclose a cyber community (Amendment REMARKS page 21, paragraph 7 and page 22, paragraph 1) and that *Kephart et al* does not disclose a cyber character that grows by learning (Amendment REMARKS page 22, paragraph 3). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection: *Gabai et al's* Abstract, Detailed Description text, paragraphs 89, 144, 271, 292 and 341-344 inherently disclose claim 1's cyber character which/that grows by learning online while *Nakamura et al's* Abstract implicitly discloses claim 1's cyber character, *Yang et al's* Abstract explicitly discloses claim 1's cyber

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character, *Olaffson* page 1557, right column, paragraph 1 and page 1557, left column, paragraph 3 explicitly disclose claim 1's growth by learning.

Also, *Gabai et al's* Detailed Description text, paragraph 89 inherently discloses claim 1's cyber community while *Nakamura et al's* Abstract explicitly discloses claim 1's cyber community and *Yang et al* Abstract implicitly discloses claim 1's cyber community. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2) and applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2).

Applicants argue that *Yamaguchi et al* does not disclose claim 1's cyber character/toy learning or receiving a user's learning experience (Amendment REMARKS page 22, paragraph 2). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection: *Gabai et al's* Abstract, Detailed Description text, paragraph 89, 144, 271, 292 and 341-344 disclose claim 1's cyber character/toy learning or receiving a user's learning experience while *Nakamura et al's* Abstract implicitly discloses claim 1's cyber character, *Yang et al's* Abstract explicitly discloses claim 1's cyber character and *Olaffson* page 1557, right column, paragraph 1 and page 1557, left column, paragraph 3 explicitly disclose claim 1's growth by learning. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment



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(*Yang et al*, page 207, left column, paragraph 2) and applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2).

Applicants argue that *Freeman et al* does not disclose claim 1's cyber character/toy/community which grows by learning online and receiving a user's learning experience (Amendment REMARKS page 22, paragraph 4). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection: *Gabai et al's* Abstract, Detailed Description text, paragraphs 89, 144, 271, 292 and 341-344 disclose claim 1's cyber character/toy/community learning and receiving a user's learning experience while *Nakamura et al's* Abstract implicitly discloses claim 1's cyber character, *Yang et al's* Abstract explicitly discloses claim 1's cyber character and *Olaffson* page 1557, right column, paragraph 1 and page 1557, left column, paragraph 3 explicitly disclose claim 1's growth by learning.

Also, *Gabai et al's* Detailed Description text, paragraphs 89, 144, 271, 292 and 341-344 inherently discloses claim 1's cyber community while *Nakamura et al's* Abstract explicitly discloses claim 1's cyber community and *Yang et al's* Abstract implicitly discloses claim 1's cyber community. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2) and applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2).

Applicants argue that *Baer* USPN 4846693, *Berman* USPN 4373918, *Murphy* USPN 6564380 and *Sterling* USPN 6466975 fail to overcome the deficiencies of the *Danieli et al*, *Gagin et al*, *Yamaguchi et al*, *Kephart et al* and *Freeman et al* references in regards to claim 5 (Amendment REMARKS page 23, paragraph 2). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection: *Gabai et al*'s Abstract, Detailed Description text, paragraphs 89, 144, 271, 292 and 341-344 disclose claim 5's cyber character/toy/community learning and receiving a user's learning experience while *Nakamura et al*'s Abstract implicitly discloses claim 5's cyber character, *Yang et al*'s Abstract explicitly discloses claim 5's cyber character and *Okada et al*'s USPN 6,609,968 Detailed Description text, paragraph 23 discloses claim 5's home rearing a cyber character limitation.

Also, *Gabai et al*'s Detailed Description text, paragraph 89, 144, 271, 292 and 341-344 inherently discloses claim 5's cyber community while *Nakamura et al*'s Abstract explicitly discloses claim 5's cyber community and *Yang et al*'s Abstract implicitly discloses claim 5's cyber community. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2) and enhancing the satisfaction of a player (*Okada et al*, Detailed Description text, paragraph 26).

Applicants argue that *Anderson et al* "A continuous media I/O server and its synchronization mechanism" fails to overcome the deficiencies of the *Danieli et al*,

*Gagin et al*, *Yamaguchi et al* and *Kephart et al* references in regards to claim 6 (Amendment REMARKS page 23, paragraph 5). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection: *Gabai et al*'s Abstract, Brief Summary text, paragraph 24, Detailed Description text, paragraphs 89, 144, 271, 292 and 341-344 disclose claim 6's cyber character/toy/community learning and receiving a user's learning experience while *Nakamura et al*'s Abstract implicitly discloses claim 6's cyber character, *Yang et al*'s Abstract explicitly discloses claim 6's cyber character and *Brown*'s USPN 6,210,272 Detailed Description text, paragraph 31 discloses claim 6's the network server is characterized in that programs for synchronizing the cyber community are provided to respective users to for contacting cyber characters of other users limitation.

Also, *Gabai et al*'s Detailed Description text, paragraph 89 inherently discloses claim 6's cyber community while *Nakamura et al*'s Abstract explicitly discloses claim 6's cyber community and *Yang et al* Abstract implicitly discloses claim 6's cyber community. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2) and correlating the players progress in the game (*Brown*, Detailed Description text, paragraph 33).

Applicants argue that *Wu* USPN 6,275,575 fails to overcome the deficiencies of the *Danieli et al*, *Gagin et al*, *Yamaguchi et al* and *Kephart et al* references in regards to claims 8 and 14-16 (Amendment REMARKS page 23, paragraph 8). Applicant's

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arguments have been fully considered, but are moot in view of new grounds of rejection:

*Gabai et al's* Abstract, Brief Summary text, paragraph 24, Detailed Description text, paragraphs 89, 144, 271, 292, 317 and 341-344 disclose claims 8 and 14-16's cyber character/toy/community learning and receiving a user's learning experience while *Nakamura et al's* Abstract implicitly discloses claims 8 and 14-16's cyber character, *Yang et al's* Abstract explicitly discloses claims 8 and 14-16's cyber character, *Bushmitch et al's* USPN US 6,494,762 Detailed Description text, paragraphs 2-5 discloses claim 8's performance apparatus has wire and wireless communication functions and is one of a computer, a mobile phone and a PDA limitation, *Faris et al's* USPN 6,659,861 Detailed Description text, paragraphs 26 and 33 disclose claims 14-15 performance apparatus is used to operate the cyber community by downloading a program for operating the cyber community and data information from the network server to reduce the amount of data which is transmitted between the network server and the performance unit limitation and *Gechter's* USPN 5,498,002 Detailed Description text, paragraph 100 discloses claim 16's updating the operating/application program according to the extent of learning of the toy limitation.

Also, *Gabai et al's* Detailed Description text, paragraph 89 inherently discloses claims 8 and 14-16's cyber community while *Nakamura et al's* Abstract explicitly discloses claims 8 and 14-16's cyber community and *Yang et al's* Abstract implicitly discloses claims 8 and 14-16's cyber community. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2),

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interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2), analyzing and correlating multiple stimuli (*Bushmitch et al*, Detailed Description text, paragraph 42), greatly reducing the communications loading on central "trunk" network links (*Faris et al*, Detailed Description text, paragraph 32) and following the behavioral logic embodied by the characters and the modes of interaction set by the game (*Gechter*, Brief Summary text, paragraph 8).

Applicants argue that *Zutavern et al* "Optically-activated GaAs switches for compact accelerators and short pulse sensors" fails to overcome the deficiencies of the *Danieli et al*, *Gagin et al*, *Yamaguchi et al*, *Kephart et al* and *Freeman et al* references in regards to claim 10 (Amendment REMARKS page 24, paragraphs 1-3). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection: *Gabai et al*'s Abstract, Brief Summary text, paragraph 24, Detailed Description text, paragraphs 89, 127, 144, 196, 260-261, 263, 271, 292, 317 and 341-344 disclose claim 10's cyber character/toy/community learning, receiving a user's learning experience, a sensor for sensing an outside pulsation, an input apparatus for inputting one of an image, audio information and letters and a communication apparatus for wire and wireless communication limitations while *Nakamura et al*'s Abstract implicitly discloses claim 10's cyber character, *Yang et al*'s Abstract explicitly discloses claim 10's cyber character.

Also, *Gabai et al*'s Detailed Description text, paragraph 89 inherently discloses claim 10's cyber community while *Nakamura et al*'s Abstract explicitly discloses claim 10's cyber community and *Yang et al*'s Abstract implicitly discloses claim 10's cyber

community. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2) and interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2).

Applicants argue that *Jigour et al* USPN 5877975 fails to overcome the deficiencies of the *Danieli et al*, *Gagin et al*, *Yamaguchi et al*, *Kephart et al* and *Freeman et al* references in regards to claim 17 (Amendment REMARKS page 24, paragraphs 4-6). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection: *Gabai et al*'s Abstract, Brief Summary text, paragraph 24, Detailed Description text, paragraphs 89, 103, 127, 144, , 271, 292, 317 and 341-344 disclose claim 17's cyber character/toy/community learning limitation while *Nakamura et al*'s Abstract implicitly discloses claim 17's cyber character, *Yang et al*'s Abstract explicitly discloses claim 17's cyber character and *Yokoo et al*'s USPN 6,449,518 Detailed Description text, paragraphs 65 and 110 discloses claim 17's the memory of the toy comprises a plurality of memories and wherein the memories allow the toy to have different experiences by replacing at least one of the plurality of memories limitation.

Also, *Gabai et al*'s Detailed Description text, paragraph 89 inherently discloses claim 17's cyber community while *Nakamura et al*'s Abstract explicitly discloses claim 17's cyber community and *Yang et al*'s Abstract implicitly discloses claim 17's cyber community. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters

(*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2) and picking up a part of the gene data of an electronic pet serving as a parent (*Yokoo et al*, Detailed Description text, paragraph 107).

Applicants argue that *Hill* USPN 4802078 and *Brelis et al* USPN 6544040 fail to overcome the deficiencies of the *Danieli et al*, *Gagin et al*, *Yamaguchi et al*, *Kephart et al* and *Freeman et al* references in regards to claim 18 (Amendment REMARKS page 24, paragraphs 7-9). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection: *Gabai et al's* Abstract, Detailed Description text, paragraphs 89, 127, 144, 150-151, 199, 271, 292-293, 303, 341-344 and 397-398 disclose claim 18's cyber character/toy/community learning limitation while *Nakamura et al's* Abstract implicitly discloses claim 18's cyber character, *Yang et al's* Abstract explicitly discloses claim 18's cyber character, *Olafsson's* page 1557, right column, paragraph 1 and page 1556, section I, paragraph 1 explicitly disclose selecting a user mode to identify the user of the toy, *Hornsby et al's* USPN 6,527,610 Detailed Description text, paragraphs 18-19 and 32 discloses claim 18's turning on the power supply of the toy, *Hawkins et al's* USPN 6,009,458 Figs. 1, 5-6 and 9 as well as Brief Summary text, paragraph 30 and Detailed Description text, paragraphs 82, 95 and 187 disclose claim 18's selecting a user mode to identify the user of the toy and selecting a default user if user mode is not selected limitations and *Feigenbaum et al's* "The Handbook of Artificial Intelligence Volume 1" page 219, Procedural Knowledge in

Frames and Scripts section, paragraph 2 discloses the selecting a default user if user mode is not selected limitations.

Also, *Gabai et al's* Detailed Description text, paragraph 89 inherently discloses claim 18's cyber community while *Nakamura et al's* Abstract explicitly discloses claim 18's cyber community and *Yang et al's* Abstract implicitly discloses claim 18's cyber community. Furthermore, the purpose and motivation for modifying *Gabai et al* as taught by other references include directing autonomous animated characters (*Nakamura et al*, page 40, right column, paragraph 2), interacting with a 'dog' character in a mixed environment (*Yang et al*, page 207, left column, paragraph 2), applying a set of strategies (*Olaffson*, page 1556, section I, paragraph 2), controlling the images displayed and other operational parameters of the video and/or audio displays used in the present invention (*Hornsby et al*, Detailed Description text, paragraph 20), viewing, mapping, or simply selecting playing objects (*Hawkins et al*, Detailed Description text, paragraph 249) and specifying appropriate methods that can take advantage of the current context (*Feigenbaum et al*, page 320, paragraph 1).

As set forth above with regards to *Gabai et al*, *Nakamura et al*, *Yang et al*, *Olaffson*, *Okada et al*, *Brown*, *Bushmitch et al*, *Yokoo et al*, *Faris et al*, *Gechter*, *Hornsby et al*, *Hawkins et al* and *Feigenbaum et al*, the items listed explicitly and inherently teach each element of the applicants' claimed limitations. Applicants have not set forth any distinction or offered any dispute between the claims of the subject application, *Gabai et al's* Methods and apparatus for integration of interactive toys with interactive television and cellular communication systems, *Nakamura et al's* Play and



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Learning in the Digital Future, *Yang et al's* Interactive artificial life based on behavior and perception in a virtual environment, *Olaffson's* Games on networks, *Okada et al's* Rearing simulation apparatus, *Brown's* Multi-player interactive electronic game for health education, *Bushmitch et al's* Portable electronic subscription device and service, *Yokoo et al's* Storage medium, robot, information processing device and electronic pet system, *Faris et al's* Internet-based system for enabling a time-constrained competition among a plurality of participants over the internet, *Gechter's* Interactive electronic games and screen savers with multiple characters, *Hornsby et al's* Wearable interactive digital amusement device, *Hawkins et al's* Networked computer game system with persistent playing objects and *Feigenbaum et al's* The Handbook of Artificial Intelligence Volume 1.

### ***Conclusion***

The prior art made of record is considered pertinent to applicant's disclosure:

Any inquiry concerning this communication or earlier communications from the Office should be directed to Melvin Bell whose telephone number is 571-272-3680. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:00 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

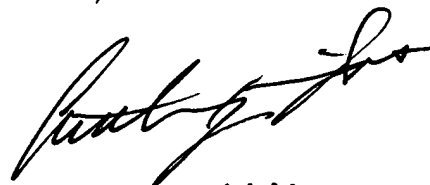
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MB

May 5, 2005



**Anthony Knight**  
**Supervisory Patent Examiner**  
**Group 3600**



OK TO ENTER AS APPROVED  
M.D. 5/2/05

Serial No: 09/931,362  
Filed: August 16, 2001  
Attorney Docket No.: 2080-3-35  
For: DIGITAL TELEVISION SYSTEM  
Figure 2 (Replacement)

FIG. 2

